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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,624	10/27/2000	Barry Allan Fisher	8964.72USU1	4935
23552	7590	11/14/2003	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			HESSELTINE, RYAN J	
		ART UNIT		PAPER NUMBER
		2623		
DATE MAILED: 11/14/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/698,624	FISHER ET AL.
	Examiner	Art Unit
	Ryan J Hesseltine	2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> .	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

1. Claim 1 is objected to because of the following informalities: line 1 states, "A portable method of real-time identification and verification..." It is unclear how a method can be portable and should therefore be cancelled from the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine et al. (USPN 5,222,152, newly cited), hereafter Fishbine, in view of Glaze et al. (USPN 6,320,974, newly cited), hereafter Glaze.

4. Regarding claim 1, Fishbine discloses a portable method of real-time identification and verification of the identity of a person comprising the following steps: providing a portable

handheld device (Figure 1, element 10; column 3, line 4-36); capturing an image of a fingerprint (column 3, line 13-17); storing (recording) fingerprint images in temporary data storage (inherent) of the portable handheld device (column 4, line 10-29); transmitting fingerprint images to a central processor for processing (column 3, line 19-22); processing the transmitted fingerprint images to determine if there is matching fingerprint information (identity verification) in central data storage (column 4, line 45-51); and displaying the data received on a display (26) of the portable handheld device (column 3, line 19-30).

5. Fishbine does not explicitly disclose processing the fingerprint image to determine if the fingerprint image meets a predetermined quality level or receiving data from the central processor relating to the processed fingerprint image. Glaze discloses a stand-alone biometric identification system wherein quality analysis is performed on a scanned fingerprint data to make sure the fingerprint image is of sufficient quality (column 7, line 57-65). Glaze further discloses a communications link between remote workstations and a centralized server for transmitting and receiving updated workstation files (column 5, line 54-column 6, line 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine if the fingerprint image meets a predetermined quality level and receive data from the central processor relating to the processed fingerprint image as taught by Glaze in order to make sure that the fingerprint image is of sufficient quality (column 7, line 61-63) and to ensure that all the data needed to perform identification matching is provided at every workstation by periodic updates made via a communications link such as public switched telephone network, cellular, or satellite based communications (column 8, line 5-13).

6. Regarding claim 2, Fishbine discloses that the step of capturing a fingerprint image includes the steps of: positioning the finger on a finger receiving surface of the portable device; and scanning a slap imprint of the finger (column 3, line 15-19).

7. Regarding claim 3, Fishbine discloses the finger receiving surface captures fingerprint images using an illumination source 16 consisting of light-emitting diodes attached to side surfaces of the finger prism (column 3, line 56-60), but does not explicitly disclose that fingerprint images are captured in varying illumination conditions ranging from bright sunlight to total darkness. It would have been obvious to one of ordinary skill in the art at the time the invention was made to capture fingerprint images using an internal illumination source as taught by Fishbine in order to capture fingerprint images in varying illumination conditions without relying on external light sources.

8. Regarding claim 4, Fishbine discloses that the step of capturing a fingerprint image includes the steps of: positioning the finger on a finger receiving surface of the portable device; and scanning an image of the finger (column 3, line 15-19), but does not explicitly disclose that the image is a rolled fingerprint. The examiner takes Official Notice that scanning a rolled fingerprint is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to scan a rolled fingerprint in order to obtain an image of the entire fingerprint including the sides for increase matching and security.

9. Regarding claim 5, Fishbine discloses that the step of capturing a fingerprint comprising scanning a latent imprint (inked fingerprint images on paper) is well known in the art (column 1, line 18-27).

10. Regarding claim 6, Glaze discloses that the step of capturing a fingerprint image includes the step of determining the image quality of the fingerprint captured (column 7, line 61-63).

11. Regarding claim 7, Fishbine discloses that the step of transmitting fingerprint images includes the steps of: a wireless transmission from the portable handheld device to a wireless mobile unit for processing (column 3, line 19-36); and wireless transmission from the wireless mobile unit to the central processor for comparison of the fingerprint images transmitted to a plurality of previously stored images to immediately determine identity and background information on individuals being fingerprinted in the field (column 4, line 42-51).

12. Regarding claim 8, Fishbine discloses including the step of capturing a facial image ("mug shot") and transmitting the captured facial image to a central processor, wherein the step of transmitting the facial image to the central processor includes the steps of: a wireless transmission from the portable handheld device to a wireless mobile unit for processing (column 3, line 19-36); and wireless transmission from the wireless mobile unit to the central processor for comparison of the facial images transmitted to a plurality of previously stored facial images to immediately determine identity and background information on individuals in the field (column 4, line 42-51).

13. Regarding claim 9, Fishbine discloses including the steps of recording, displaying, and transmitting live video images captured (column 4, line 30-40), wherein the step of transmitting the live video images captured includes the steps of: a wireless transmission of the live video images captured from the portable handheld device to a wireless mobile unit for processing; and wireless transmission of the live video images captured from the wireless mobile unit to the

central processor for storage in central data storage (column 4, line 42-51 and line 61-column 5, line 9).

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze as applied to claim 1 above, and further in view of Fuller et al. (USPN 4,843,377, cited on applicant's IDS), hereafter Fuller.

15. Regarding claim 10, Fishbine discloses recording, playing back, displaying, analyzing, and transmitting information (live video images) captured (column 4, line 30-40), wherein the step of transmitting the information captured includes the steps of: a wireless transmission of the information captured from the portable handheld device to a wireless mobile unit for processing; and wireless transmission of the information captured from the wireless mobile unit to the central processor to determine identity and background information on individuals in the field (column 4, line 42-51 and line 61-column 5, line 9). Fishbine further discloses that the video camera may also be connected to a microphone (column 5, line 2-4), but does not disclose that the microphone is used to record audio information that is utilized as the live video image information described above. Fuller discloses a remote confinement system including an identity verifier 15 such as a pictorial camera, which develops visual image information to be transmitted over communications link to a central office 12 (similar to Fishbine). Fuller goes on to disclose that an alternative embodiment employs voice information that may be transmitted to the central office as a characteristic voiceprint unique to the prisoner (column 6, line 66-column 7, line 8) and an identifying comparison is then made automatically at the home location or alternatively at the central office (column 7, line 31-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to compare the audio information transmitted to a

plurality of stored voice files to immediately determine identity and background information on individuals in the field as taught by Fuller in order to verify an individual's identity using an alternative or additional biometric that is unique to the individual (column 7, line 6-17) or to provide a dual purpose sampling device for obtaining breath and voice samples in such a way that samples are obtained sufficiently close together so they are assured of coming from the same individual (column 8, line 10-16).

16. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze as applied to claim 1 above, and further in view of Smith (USPN 6,012,636, newly cited).

17. Regarding claim 11, Fishbine does not explicitly disclose capturing identification data from an external source. Smith discloses a multiple card data system having first and second memory elements including magnetic strip and fingerprint scanning means wherein identification data (data unique to the card user including name, birth date, social security number, etc.) is captured from an external source (user card 10; column 8, line 11-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to capture identification data from an external source as taught by Smith in order to prevent a user from having a negative reaction to fingerprint imaging because the fingerprint is compared to a record of the user's fingerprint stored in the device (user card) rather than being compared to an impersonal, possibly remote, database (column 5, line 10-44).

18. Regarding claim 12, Smith discloses that the external source is an identification card having a magnetic strip (14) bar code (Figure 2b; column 8, line 16-22).

19. Regarding claim 13, Smith discloses that the external source is a smart card (Figure 3a; column 8, line 23-31).

20. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze as applied to claim 1 above, and further in view of Fan (USPN 6,552,682, newly cited).

21. Regarding claim 14, neither Fishbine nor Glaze discloses capturing geographical position and direction data. Fan discloses a method for distributing location-relevant information using a network including providing access only after proper identification or authentication using, for example, a scanned and digitized fingerprint (column 11, line 20-38) wherein locations can be determined using a global positioning system (GPS; column 11, line 1-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to capture geographical position and direction data as taught by Fan in order to supply the client (user) with information specific to the GPS position thereby relieving the client of the task of filtering for relevant information (column 1, line 62-column 2, line 7), or using the GPS position in a business or financial transaction as a code word to authenticate the digital instrument or to identify the first party or to establish the location for legal and other purposes (column 2, line 8-24).

22. Regarding claim 15, Fan does not explicitly disclose the step of transmitting a signal for emergency assistance, but it is disclosed that a directory assistance service may provide GPS location in response to a name or telephone number query (column 11, line 9-14). The examiner takes Official Notice that transmitting a signal for emergency assistance is well known in the art such as the universal 911 emergency assistance telephone number. It would have been obvious

to one of ordinary skill in the art at the time the invention was made to transmit a signal for emergency assistance in order to alert authorities of an emergency situation or that help is needed in some life-threatening or other situation.

23. Claims 16-18, 22, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze and further in view of Mark (USPN 5,583,933, newly cited).

24. Regarding claim 16, Fishbine discloses a portable apparatus (10) for identification and verification of a fingerprint comprising: a housing (inherent) that provides for operation and command of all functions of the apparatus (Figure 1; column 3, line 4-13); a user interface (terminal 28) attached to the housing for data input (keyboard), display (monitor 26), and receipt (fingerprint scanner 12), the user interface including at least a finger-receiving surface (finger prism 14) for receiving images of a fingerprint and buttons (keyboard) for data entry and command execution (column 3, line 7-14); a sensor (image recorder 18) positioned within the housing and electrically connected to the user interface for capturing the fingerprint images from the finger-receiving surface (column 3, line 15-17); a processor (terminal 28) electrically connected to the sensor for processing the fingerprint images captured to determine if the fingerprint images captured meet a minimum fingerprint quality level (see above discussion with respect to claim 1 in view of Glaze); and a transmitter (30), electrically connected to the processor for transmitting fingerprint images to a central processor (mobile unit/central facility) for identification and verification (column 4, line 33-51).

25. Fishbine does not disclose that said housing has an ergonomic handle formed thereon that provides one hand operation and command of all functions of the apparatus. Mark discloses a method and apparatus for the secure communication of data including an auto-dialer used to

store and supply biometric information for controlling access to a system using an input device 903 such as a microphone (column 50, line 22-37 and 45-55) and discloses that the process can be applied to other biometric measures such as fingerprints, retina, etc. (column 51, line 20-24). Mark further discloses that the auto-dialer housing 101, with elongated handle 140 (column 61, line 22-32), includes activation switch 131 and scroll buttons 119 provided on the top side of the housing to facilitate easy one-handed operation (column 61, line 39-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a housing having an ergonomic handle formed thereon that provides one hand operation and command of all functions of the apparatus as taught by Mark in order to make the device more convenient and simple to use by limiting the number of buttons used for operation and to free up the user's other hand for other uses (column 62, line 64-column 63, line 5).

26. Regarding claim 17, Fishbine discloses that the portable handheld device further includes a module operating within the processor that provides for the capture of the fingerprint image prior to transmittal (column 3, line 19-22) and further discloses that live fingerprint scans overcome inherent weaknesses in the ink capture of fingerprints and allow for image enhancement if necessary (column 1, line 44-49).

27. Regarding claim 18, Glaze discloses that the portable handheld device further includes data storage (databases) electrically connected to the sensor (column 5, line 58-67) for storing the fingerprint images that meet a minimum fingerprint quality level (see above discussion of claims 1 and 6).

28. Regarding claim 22, Fishbine does not disclose that the user interface includes a bar code reader for entry of identification data, but the examiner takes Official Notice that using a bar

code reader to enter identification data is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to enter identification data using a bar code reader in order to quickly and automatically enter identification data using a hand-held scanner without having to make contact with the item onto which the bar code is printed.

29. Regarding claim 25, Glaze discloses that the user interface includes a data entry (keyboard) device for entry of text (biodata) or voice data (column 7, line 66-column 8, line 5).

30. Regarding claim 26, Fishbine discloses that the step of capturing a fingerprint comprising scanning a latent imprint (inked fingerprint images on paper) is well known in the art (column 1, line 18-27), but does not explicitly disclose that the portable apparatus includes a latent fingerprint alignment guide. The examiner takes Official Notice that providing a latent fingerprint alignment guide is well known in the fingerprinting art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a latent fingerprint alignment guide in order to ensure that the latent fingerprint is properly aligned on the imaging sensor.

31. Regarding claim 27, Fishbine discloses that the transmitter is a wireless transmitter (column 3, line 19-36).

32. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze in view of Mark as applied to claim 16 above, and further in view of Fujieda et al. (USPN 6,011,860, newly cited), hereafter Fujieda.

33. Regarding claim 19, Fishbine does not disclose a removable baffle for preventing illumination sources to interfere with capturing the fingerprint on the finger-receiving surface.

Fujieda discloses a small, reliable image input apparatus incorporated in a fingerprint collation system of personal identification including a photo-shield case 21 having an opening 21b shaped like a finger (Figure 3; column 5, line 29-40). Fujieda does not explicitly disclose that the photo-shield case is removable, but it would be logical to make it removable to allow for replacement in the case of breakage, or different-sized openings for different-sized fingers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a removable baffle on the finger-receiving surface as taught by Fujieda in order to prevent the inner space 21a from being illuminated by external light (column 5, line 33-37).

34. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze in view of Mark as applied to claim 16 above, and further in view of Fuller.

35. Regarding claim 20, Fishbine discloses a recorder that records and plays back video information that is analyzed by the processor and also that a microphone may be connected to the video camera (column 4, line 30-40; column 5, line 2-9), but does not explicitly disclose that the recorder records and plays back audio information that is analyzed by the processor. Fuller discloses an embodiment employing voice information that may be transmitted to the central office as a characteristic voiceprint unique to the prisoner (column 6, line 66-column 7, line 8) and an identifying comparison is then made automatically at the home location or alternatively at the central office (column 7, line 31-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to record and play back audio information that is analyzed by a processor as taught by Fuller in order to verify an individual's identity using an alternative or additional biometric that is unique to the individual (column 7, line 6-17) or to provide a dual purpose sampling device for obtaining breath and voice samples in such a way

that samples are obtained sufficiently close together so they are assured of coming from the same individual (column 8, line 10-16).

36. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze in view of Mark as applied to claim 16 above, and further in view of Smith.

37. Regarding claim 21, Fishbine does not disclose that the user interface includes a card reader for entry of identification data from smart cards or cards having magnetic strips. Smith discloses a multiple card data system having first and second memory elements including magnetic strip and fingerprint scanning means wherein identification data (data unique to the card user including name, birth date, social security number, etc.) is captured from an identification card having a magnetic strip (14) bar code (Figure 2b; column 8, line 11-22), or a smart card (Figure 3a; column 8, line 23-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to capture identification data from a card reader for entry of identification data from smart cards or cards having magnetic strips as taught by Smith in order to prevent a user from having a negative reaction to fingerprint imaging because the fingerprint is compared to a record of the user's fingerprint stored in the device (user card) rather than being compared to an impersonal, possibly remote, database (column 5, line 10-44).

38. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine in view of Glaze in view of Mark as applied to claim 16 above, and further in view of Fan.

39. Regarding claim 23, Fishbine does not disclose a GPS receiving electrically connected to the processor to provide for the capture of geographical position and direction data. Fan discloses a method for distributing location-relevant information wherein locations can be

determined using a global positioning system (GPS; column 11, line 1-14; see above discussion of claim 14).

40. Regarding claim 24, both Fishbine and Glaze disclose a wireless transmitter electrically connected to the processor, and Glaze discloses a single switch (submit button) that initiates sending of data to databases stored in the computer of the workstation (column 8, line 4-7). Fan discloses that a directory assistance service may provide GPS location in response to a name or telephone number query (column 11, line 9-14), but none explicitly disclose that a single switch transmits a signal for emergency assistance. The examiner takes Official Notice that transmitting a signal for emergency assistance is well known in the art such as the universal 911 emergency assistance telephone number, which could be programmed as a “speed dial” number, etc. It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit a signal for emergency assistance in order to alert authorities of an emergency situation or that help is needed in some life-threatening or other situation.

Conclusion

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 3,619,060 to Johnson discloses an identification device including a top guide and a pair of side guides to position the finger. USPN 5,601,867 to Riedl et al. discloses a method and apparatus for generating fingerprints and other skin prints that offers portability and one hand operation. USPN 5,732,148 to Keagy et al. discloses an apparatus and method for electronically acquiring fingerprint images with low cost removable platen and separate imaging device. USPN 6,040,783 to Houvener et al. discloses a system and method for remote, wireless positive identity verification. USPN 6,389,290 to Kikinis et al. discloses an enhanced weather

and traffic information from mobile communication devices including the use of GPS. USPN 6,400,836 to Senior discloses a combined fingerprint acquisition and control device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J Hesseltine whose telephone number is 703-306-4069. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

rjh
November 5, 2003

JINGGE WU
PRIMARY EXAMINER